## **CLAIM LISTING**

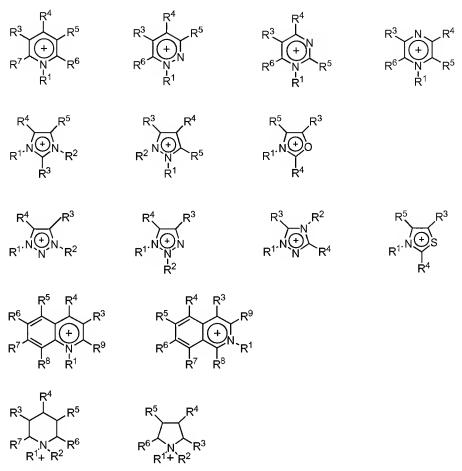
No claims have been amended, canceled, or added. A complete claim listing is included for the convenience of the Examiner.

(Previously Presented) A method for depolymerizing starch comprising
mixing a starch material with an ionic liquid solvent comprising a cation and an
anion to dissolve the starch, and then

treating the dissolved starch by agitating at a temperature and for a period for time to effect depolymerization of the starch into desired depolymerization products.

- 2. (Original) The method according to claim 1 wherein microwave irradiation is applied to assist in dissolution and depolymerization.
- 3. (Previously Presented) The method according to claim 1 wherein pressure is applied to assist in dissolution and depolymerization.
- 4. (Previously Presented) The method according to claim 1 wherein the depolymerization temperature is at least 70°C.
- 5. (Previously Presented) The method according to claim 1 wherein the depolymerization period is at least 5 minutes.
- 6. (Previously Presented) The method according to claim 1 wherein the starch is depolymerized selectively such that the amylose of the starch is depolymerized into sugars and the amylopectin of the starch is retained essentially unchanged.
- 7. (Previously Presented) The method according to claim 1 wherein the starch is depolymerized quantitatively such that both the amylose and the amylopectin of the starch are depolymerized into sugars.
- 8. (Original) The method according to claim 1 wherein the ionic liquid solvent is molten at a temperature of below 200°C.

9. (Original) The method according to claim 1 wherein the cation of the ionic liquid solvent is selected from the group consisting of



wherein  $R^1$  and  $R^2$  are independently a  $C_1$ - $C_6$  alkyl or  $C_2$ - $C_6$  alkoxyalkyl group, and  $R^3$ ,  $R^4$ ,  $R^5$ ,  $R^6$ ,  $R^7$ ,  $R^8$  and  $R^9$  are independently hydrogen, a  $C_1$ - $C_6$  alkyl,  $C_2$ - $C_6$  alkoxyalkyl or  $C_1$ - $C_6$  alkoxy group or halogen, and wherein the anion of the ionic liquid solvent is halogen, pseudohalogen, perchlorate or  $C_1$ - $C_6$  carboxylate.

10. (Previously Presented) The method according to claim 9 wherein said cation comprises

$$\begin{array}{c}
\mathbb{R}^4 \\
\mathbb{R}^5
\end{array}$$

$$\mathbb{R}^5$$

$$\mathbb{R}^2$$

wherein  $R^3$ - $R^5$  are each hydrogen and  $R^1$  and  $R^2$  are the same or different and represent  $C_1$ - $C_6$  alkyl, and said anion is halogen.

11. (Original) The method according to claim 1 wherein the cation of the ionic liquid solvent is

wherein  $R^{10}$ ,  $R^{11}$ ,  $R^{12}$  and  $R^{13}$  are independently a  $C_1$ - $C_{30}$  alkyl,  $C_3$ - $C_8$  carbocyclic or  $C_3$ - $C_8$  heterocyclic group and the anion of the ionic liquid solvent is halogen, pseudohalogen, perchlorate,  $C_1$ - $C_6$  carboxylate or hydroxide.

- 12. (Previously Presented) The method according to claim 1, further comprising separating the depolymerization products from the solution by adding a non-solvent for the depolymerization products to precipitate the depolymerization products.
- 13. (Original) The method according to claim 12 wherein said non-solvent is an alcohol, a ketone, acetonitrile, dichloromethane, a polyglycol, an ether or water.
- 14. (Previously Presented) The method according to claim 1, further comprising separating the depolymerization products from the solution by extraction with a non-solvent for the ionic liquid solvent.
- 15. (Previously Presented) The method according to claim 2 wherein pressure is applied to assist in dissolution and depolymerization.
- 16. (Previously Presented) The method according to claim 1 wherein the depolymerization temperature is at least 80°C.
- 17. (Previously Presented) The method according to claim 10 wherein said anion is chloride.